



**ENVIRONMENTAL PROTECTION AGENCY**

**40 CFR Parts 52 and 81**

**[EPA-R05-OAR-2012-0212; FRL-9756-7]**

**Approval and Promulgation of Air Quality Implementation Plans;  
Ohio; Redesignation of the Ohio portion of the Parkersburg-  
Marietta Area to Attainment of the 1997 Annual Standard for Fine  
Particulate Matter**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Proposed rule.

**SUMMARY:** On February 29, 2012, the Ohio Environmental Protection Agency submitted a request for EPA to approve the redesignation of the Ohio portion of the Parkersburg-Marietta West Virginia-Ohio nonattainment area to attainment of the 1997 annual standard for fine particulate matter (PM<sub>2.5</sub>). EPA is proposing to approve Ohio's request. EPA is proposing to determine that the entire Parkersburg-Marietta area attains the 1997 annual PM<sub>2.5</sub> standard, based on the most recent three years of certified air quality data. EPA is proposing to approve, as revisions to the Ohio State Implementation Plan (SIP), the state's plan for maintaining the 1997 annual PM<sub>2.5</sub> National Ambient Air Quality Standard (NAAQS) through 2022 in the area. EPA is proposing to approve a 2005 emissions inventory for the Ohio portion of the Parkersburg-Marietta area as meeting the

comprehensive emissions inventory requirement of the Clean Air Act (CAA or Act). Ohio's maintenance plan submission includes an insignificance finding for the mobile source contribution of PM<sub>2.5</sub> and nitrogen oxides (NO<sub>x</sub>) to Ohio's portion of the Parkersburg-Marietta PM<sub>2.5</sub> area for transportation conformity purposes; EPA agrees with this finding and proposes to determine the insignificance of the 2022 motor vehicle emission budget (MVEB) for the Ohio portion of the Parkersburg-Marietta area for transportation conformity purposes.

**DATES:** Comments must be received on or before **[insert date 30 days after publication in the Federal Register]**.

**ADDRESSES:** Submit your comments, identified by Docket ID No. EPA-R05-OAR-2012-0212, by one of the following methods:

1. www.regulations.gov: Follow the on-line instructions for submitting comments.
2. E-mail: blakley.pamela@epa.gov.
3. Fax: (312) 692-2450.
4. Mail: Pamela Blakley, Chief, Control Strategies Section (AR-18J), U.S. Environmental Protection Agency, 77 West Jackson Boulevard, Chicago, Illinois 60604.
5. Hand Delivery: Pamela Blakley, Chief, Control Strategies Section (AR-18J), U.S. Environmental Protection Agency, 77 West Jackson Boulevard, Chicago, Illinois 60604. Such

deliveries are only accepted during the Regional Office normal hours of operation, and special arrangements should be made for deliveries of boxed information. The Regional Office official hours of business are Monday through Friday, 8:30 AM to 4:30 PM excluding Federal holidays.

*Instructions:* Direct your comments to Docket ID No.

EPA-R05-OAR-2012-0212. EPA's policy is that all comments received will be included in the public docket without change and may be made available online at [www.regulations.gov](http://www.regulations.gov), including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through [www.regulations.gov](http://www.regulations.gov) or e-mail. The [www.regulations.gov](http://www.regulations.gov) website is an "anonymous access" system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an e-mail comment directly to EPA without going through [www.regulations.gov](http://www.regulations.gov) your e-mail address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact

information in the body of your comment and with any disk or CD-ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses. For additional instructions on submitting comments, go to Section I of the SUPPLEMENTARY INFORMATION section of this document.

*Docket:* All documents in the docket are listed in the [www.regulations.gov](http://www.regulations.gov) index. Although listed in the index, some information is not publicly available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available either electronically in [www.regulations.gov](http://www.regulations.gov) or in hard copy at the Environmental Protection Agency, Region 5, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604. This facility is open from 8:30 AM to 4:30 PM, Monday through Friday, excluding Federal holidays. We recommend that you telephone Anthony Maietta, Environmental Protection Specialist, at (312) 353-8777 before visiting the Region 5 office.

**FOR FURTHER INFORMATION CONTACT:** Anthony Maietta, Environmental Protection Specialist, Control Strategies Section, Air Programs Branch (AR-18J), Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604, (312) 353-8777, [maietta.anthony@epa.gov](mailto:maietta.anthony@epa.gov).

**SUPPLEMENTARY INFORMATION:** This supplementary information section is arranged as follows:

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**I. What Should I Consider as I Prepare My Comments for EPA?**

When submitting comments, remember to:

1. Identify the rulemaking by docket number and other identifying information (subject heading, Federal Register date and page number).
2. Follow directions - EPA may ask you to respond to specific questions or organize comments by referencing a Code of Federal Regulations (CFR) part or section number.
3. Explain why you agree or disagree; suggest alternatives and substitute language for your requested changes.
4. Describe any assumptions and provide any technical information and/or data that you used.
5. If you estimate potential costs or burdens, explain how you arrived at your estimate in sufficient detail to allow for it to be reproduced.

6. Provide specific examples to illustrate your concerns, and suggest alternatives.
7. Explain your views as clearly as possible, avoiding the use of profanity or personal threats.
8. Make sure to submit your comments by the comment period deadline identified.

## **II. What Actions is EPA Proposing to Take?**

EPA is proposing to take several actions related to redesignation of the Ohio portion of the Parkersburg-Marietta area to attainment of the 1997 annual PM<sub>2.5</sub> NAAQS. In addition to EPA's December 2, 2011, determination that the area attained the NAAQS for PM<sub>2.5</sub> by the applicable attainment date based on quality-assured, certified 2007-2009 ambient air monitoring data (76 FR 75464), we are proposing to determine that the area continues to attain the NAAQS for PM<sub>2.5</sub>, based on quality-assured and certified ambient air monitoring data for 2009-2011, the most recent three years of quality-assured data for the area. EPA is proposing to find that Ohio meets the requirements for redesignation of the Parkersburg-Marietta area to attainment of the 1997 PM<sub>2.5</sub> NAAQS under section 107(d)(3)(E) of the CAA. EPA is thus proposing to approve Ohio's request to change the legal designation of its portion of the Parkersburg-Marietta area from nonattainment to attainment of the 1997 annual PM<sub>2.5</sub> NAAQS. This

action would not change the legal designation of the West Virginia portion of the area, which will be redesignated in a separate rulemaking.

Second, EPA is proposing to approve Ohio's annual  $PM_{2.5}$  maintenance plan for the Parkersburg-Marietta area as a revision to the Ohio SIP, including the insignificance determination for  $PM_{2.5}$  and  $NO_x$  emissions for the mobile source contribution of the Ohio portion of the Parkersburg-Marietta area.

Finally, EPA is proposing to approve the 2005 primary  $PM_{2.5}$ ,  $NO_x$  and sulfur dioxide ( $SO_2$ ) emissions inventories as satisfying the requirement in section 172(c)(3) of the CAA for a current, accurate and comprehensive emission inventory.

Therefore, EPA is proposing to approve the request from the State of Ohio to change the designation of Washington County (the Ohio portion of the Parkersburg-Marietta area) from nonattainment to attainment of the 1997 annual  $PM_{2.5}$  NAAQS. This action would not change the legal designation of the West Virginia portion of the area, which would be redesignated in a separate rulemaking.

### **III. What is the Background for These Actions?**

Fine particulate pollution can be emitted directly from a source (primary  $PM_{2.5}$ ) or formed secondarily through chemical reactions in the atmosphere involving precursor pollutants



emitted from a variety of sources. Sulfates are a type of secondary particulate formed from SO<sub>2</sub> emissions from power plants and industrial facilities. Nitrates, another common type of secondary particulate, are formed from combustion emissions of NO<sub>x</sub> from power plants, mobile sources and other combustion sources.

The first air quality standards for PM<sub>2.5</sub> were promulgated on July 18, 1997, at 62 FR 38652. EPA promulgated an annual standard at a level of 15 micrograms per cubic meter (µg/m<sup>3</sup>) of ambient air, based on a three-year average of the annual mean PM<sub>2.5</sub> concentrations at each monitoring site. In the same rulemaking, EPA promulgated a 24-hour PM<sub>2.5</sub> standard at 65 µg/m<sup>3</sup>, based on a three-year average of the annual 98th percentile of 24-hour PM<sub>2.5</sub> concentrations at each monitoring site.

On January 5, 2005, at 70 FR 944, EPA published air quality area designations for the 1997 annual PM<sub>2.5</sub> standard based on air quality data for calendar years 2001-2003. In that rulemaking, EPA designated the Parkersburg-Marietta area as nonattainment for the 1997 annual PM<sub>2.5</sub> standard.

On October 17, 2006, at 71 FR 61144, EPA retained the annual PM<sub>2.5</sub> standard at 15 µg/m<sup>3</sup> (2006 annual PM<sub>2.5</sub> standard), but revised the 24-hour standard to 35 µg/m<sup>3</sup>, based again on the three-year average of the annual 98th percentile of the 24-hour

PM<sub>2.5</sub> concentrations. In response to legal challenges of the 2006 annual PM<sub>2.5</sub> standard, the U.S. Court of Appeals for the District of Columbia Circuit (D.C. Circuit) remanded this standard to EPA for further consideration. See *American Farm Bureau Federation and National Pork Producers Council, et al. v. EPA*, 559 F.3d 512 (D.C. Cir. 2009). Since the Parkersburg-Marietta area is designated as nonattainment for the 1997 annual PM<sub>2.5</sub> standard, today's proposed action addresses redesignation to attainment only for this standard.

On December 2, 2011, EPA issued a final determination that the entire Parkersburg-Marietta area has attained the 1997 PM<sub>2.5</sub> standard by the applicable attainment date (76 FR 75464). Ohio's original submittal contained complete, quality-assured and certified air monitoring data for years through 2010. Based upon our review of complete, quality-assured and certified ambient air monitoring data from 2009-2011, we are proposing to determine that the area continues to attain the 1997 annual PM<sub>2.5</sub> NAAQS. Further, preliminary data for 2012 indicate that the data will continue to show the area in attainment of the 1997 annual PM<sub>2.5</sub> NAAQS.

#### **IV. What are the Criteria for Redesignation to Attainment?**

The CAA sets forth the requirements for redesignating a nonattainment area to attainment. Specifically, section

107(d)(3)(E) of the CAA allows for redesignation provided that: (1) the Administrator determines that the area has attained the applicable NAAQS based on current air quality data; (2) the Administrator has fully approved an applicable SIP for the area under section 110(k) of the CAA; (3) the Administrator determines that the improvement in air quality is due to permanent and enforceable emission reductions resulting from implementation of the applicable SIP, Federal air pollution control regulations and other permanent and enforceable emission reductions; (4) the Administrator has fully approved a maintenance plan for the area meeting the requirements of section 175A of the CAA; and (5) the state containing the area has met all requirements applicable to the area for purposes of redesignation under section 110 and part D of the CAA.

**V. What is EPA's Analysis of the State's Request?**

EPA is proposing to approve the redesignation of the Ohio portion of the Parkersburg-Marietta area to attainment of the 1997 annual PM<sub>2.5</sub> NAAQS and is proposing to approve Ohio's maintenance plan for the area and other related SIP revisions. The bases for these actions follow.

**1. Attainment**

As noted above, in a rulemaking published on December 2, 2011, EPA determined that the Parkersburg-Marietta area had

attained the 1997 annual PM<sub>2.5</sub> NAAQS by the applicable attainment date. The basis and effect of this determination were discussed in the proposed (76 FR 43634) and final (76 FR 75464) actions. The determination was based on quality-assured air quality monitoring data for 2007-2009 showing the area had met the standard by the attainment date. The data have been certified by West Virginia, the state in which the monitors for the area are located.

In this action, we are proposing to determine that the Parkersburg-Marietta area has attained the 1997 annual PM<sub>2.5</sub> NAAQS based upon the most recent three years of complete, certified and quality-assured data, as required by section 107(d)(3)(E) of the CAA. Under EPA's regulations at 40 CFR 50.7, the annual primary and secondary PM<sub>2.5</sub> standards are met when the annual arithmetic mean concentration, as determined in accordance with 40 CFR part 50, appendix N, is less than or equal to 15.0 µg/m<sup>3</sup> at all relevant monitoring sites in the area.

EPA has reviewed the ambient air quality monitoring data in the Parkersburg-Marietta area, consistent with the requirements contained at 40 CFR part 50. EPA's review focused on data recorded in the EPA Air Quality System (AQS) database for the Parkersburg-Marietta PM<sub>2.5</sub> nonattainment area from 2009-2011. EPA also considered preliminary data for 2012, which have not

yet been certified.

The Parkersburg-Marietta area has one monitor located in Wood County, West Virginia, that reported a design value from 2009-2011, the most recent three years of data, for PM<sub>2.5</sub> that measured 12.3 µg/m<sup>3</sup> for the 1997 annual standard. The monitor in the Parkersburg-Marietta area recorded complete data in accordance with criteria set forth by EPA in 40 CFR part 50, appendix N, where a complete year of air quality data comprises four calendar quarters, with each quarter containing data with at least 75 percent capture of the scheduled sampling days. Available data are considered to be sufficient for comparison to the NAAQS if three consecutive complete years of data exist. Table 1. The 1997 Annual PM<sub>2.5</sub> Design Values for the Parkersburg-Marietta Monitor with Complete Data for the 2007-2009, 2008-2010 and 2009-2011 Design Values<sup>1</sup> in µg/m<sup>3</sup>.

County	Monitor	Annual Standard Design Value 2007-2009 (µg/m <sup>3</sup> )	Annual Standard Design Value 2008-2010 (µg/m <sup>3</sup> )	Annual Standard Design Value 2009-2011 (µg/m <sup>3</sup> )
Wood, WV	Neale Elementary School 541071002	13.7	13.1	12.3

EPA's review of monitoring data from the 2007-2009, 2008-

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<sup>1</sup> As defined in 40 CFR 50 appendix N(1)(c).

2010 and 2009-2011 monitoring periods supports EPA's determination that the Parkersburg-Marietta area has monitored attainment for each time period. Additionally, because the preliminary monitoring data for 2012 are consistent with the area's continued attainment, EPA proposes to determine that the Parkersburg-Marietta area has attained the 1997 annual PM<sub>2.5</sub> standard.

**2. The Area Has Met All Applicable Requirements under Section 110 and Part D and Has a Fully Approved SIP Under Section 110(k) (Sections 107(d)(3)(E)(v) and 107(d)(3)(E)(ii))**

We believe that Ohio has met all currently applicable SIP requirements for purposes of redesignation for the Ohio portion of the Parkersburg-Marietta area under section 110 of the CAA (general SIP requirements). We are also proposing to find that the Ohio SIP meets all SIP requirements currently applicable for purposes of redesignation under part D of title I of the CAA, in accordance with section 107(d)(3)(E)(v). We are proposing to find that all applicable requirements of the Ohio SIP for purposes of redesignation have been, in accordance with section 107(d)(3)(E)(ii). As discussed below, in this action EPA is proposing to approve Ohio's 2005 emissions inventory as meeting the section 172(c)(3) comprehensive emissions inventory requirement.

In making these proposed determinations, we have ascertained which SIP requirements are applicable for purposes of redesignation, and concluded that there are SIP measures meeting those requirements and that they are approved or will be approved by the time of final rulemaking.

**a. Ohio Has Met All Applicable Requirements for Purposes of Redesignation of the Ohio Portion of the Area under Section 110 and Part D of the CAA**

**i. Section 110 General SIP Requirements**

Section 110(a) of title I of the CAA contains the general requirements for a SIP. Section 110(a)(2) provides that the implementation plan submitted by a state must have been adopted by the state after reasonable public notice and hearing, and, among other things, must: include enforceable emission limitations and other control measures, means or techniques necessary to meet the requirements of the CAA; provide for establishment and operation of appropriate devices, methods, systems and procedures necessary to monitor ambient air quality; provide for implementation of a source permit program to regulate the modification and construction of any stationary source within the areas covered by the plan; include provisions for the implementation of part C, Prevention of Significant Deterioration (PSD) and part D, New Source Review (NSR) permit

programs; include criteria for stationary source emission control measures, monitoring and reporting; include provisions for air quality modeling; and provide for public and local agency participation in planning and emission control rule development.

Section 110(a)(2)(D) of the CAA requires that SIPs contain measures to prevent sources in a state from significantly contributing to air quality problems in another state. EPA believes that the requirements linked with a particular nonattainment area's designation are the relevant measures to evaluate in reviewing a redesignation request. The transport SIP submittal requirements, where applicable, continue to apply to a state regardless of the designation of any one particular area in the state. Thus, we believe that these requirements should not be construed to be applicable requirements for purposes of redesignation.

Further, we believe that the other section 110 elements described above that are not connected with nonattainment plan submissions and not linked with an area's attainment status are also not applicable requirements for purposes of redesignation. A state remains subject to these requirements after an area is redesignated to attainment. We conclude that only the section 110 and part D requirements that are linked with a particular



area's designation are the relevant measures which we may consider in evaluating a redesignation request. This approach is consistent with EPA's existing policy on applicability of conformity and oxygenated fuels requirements for redesignation purposes, as well as with section 184 ozone transport requirements. See Reading, Pennsylvania, proposed and final rulemakings (61 FR 53174-53176, October 10, 1996) and (62 FR 24826, May 7, 1997); Cleveland-Akron-Lorain, Ohio, final rulemaking (61 FR 20458, May 7, 1996); and Tampa, Florida, final rulemaking (60 FR 62748, December 7, 1995). See also the discussion on this issue in the Cincinnati, Ohio 1-hour ozone redesignation (65 FR 37890, June 19, 2000), and in the Pittsburgh, Pennsylvania 1-hour ozone redesignation (66 FR 50399, October 19, 2001).

We have reviewed the Ohio SIP and have concluded that it meets the general SIP requirements under section 110 of the CAA to the extent they are applicable for purposes of redesignation. EPA has previously approved provisions of Ohio's SIP addressing section 110 requirements, including provisions addressing particulate matter, at 40 CFR 52.1870, respectively).

On December 5, 2007, and September 4, 2009, Ohio made submittals addressing "infrastructure SIP" elements required under CAA section 110(a)(2). EPA proposed approval of the

December 5, 2007, submittal on April 28, 2011, at 76 FR 23757, and published final approval on July 14, 2011, at 76 FR 41075. The requirements of section 110(a)(2), however, are statewide requirements that are not linked to the PM<sub>2.5</sub> nonattainment status of the Parkersburg-Marietta area. Therefore, EPA believes that these SIP elements are not applicable requirements for purposes of review of the state's PM<sub>2.5</sub> redesignation request.

**ii. Part D Requirements**

EPA is proposing to determine that, upon approval of the base year emissions inventories discussed in section V(6) of this rulemaking, the Ohio SIP will meet the SIP requirements for the Ohio portion of the Parkersburg-Marietta area applicable for purposes of redesignation under part D of the CAA.

Subpart 1 of part D, found in sections 172-176 of the CAA, sets forth the basic nonattainment requirements applicable to all nonattainment areas.

*Subpart 1 Section 172 Requirements.*

For purposes of evaluating this redesignation request, the applicable section 172 SIP requirements for the Ohio portion of the Parkersburg-Marietta area are contained in section 172(c)(1)-(9). A thorough discussion of the requirements contained in section 172 can be found in the General Preamble

for Implementation of title I (57 FR 13498, April 16, 1992).

Section 172(c)(1) requires the plans for all nonattainment areas to provide for the implementation of all Reasonably Achievable Control Measures (RACM) as expeditiously as practicable and to provide for attainment of the primary NAAQS. EPA interprets this requirement to impose a duty on all nonattainment areas to consider all available control measures and to adopt and implement such measures as are reasonably available for implementation in each area as components of the area's attainment demonstration. Because we are determining that the area has attained in this action, no additional measures are needed to provide for attainment, and section 172(c)(1) requirements are no longer considered to be applicable as long as the area continues to attain the standard until redesignation. (40 CFR 51.1004(c).)

The Reasonable Further Progress (RFP) requirement under section 172(c)(2) is defined as progress that must be made toward attainment. This requirement is not relevant for purposes of redesignation because the Parkersburg-Marietta area has monitored attainment of the 1997 annual  $PM_{2.5}$  NAAQS. (General Preamble, 57 FR 13564). See also 40 CFR 51.918. In addition, because the Parkersburg-Marietta area has attained the 1997 annual  $PM_{2.5}$  NAAQS and is no longer subject to an RFP

requirement, the requirement to submit the section 172(c)(9) contingency measures is not applicable for purposes of redesignation. *Id.*

Section 172(c)(3) requires submission and approval of a comprehensive, accurate and current inventory of actual emissions. Ohio submitted a 2005 base year emissions inventory along with their redesignation request. As discussed below in section V.6., EPA is approving the 2005 base year inventory as meeting the section 172(c)(3) emissions inventory requirement for the Ohio portion of the Parkersburg-Marietta area.

Section 172(c)(4) requires the identification and quantification of allowable emissions for major new and modified stationary sources in an area, and section 172(c)(5) requires source permits for the construction and operation of new and modified major stationary sources anywhere in the nonattainment area. EPA approved Ohio's current NSR program on January 10, 2003 (68 FR 1366). Nonetheless, since PSD requirements will apply after redesignation, the area need not have a fully-approved NSR program for purposes of redesignation, provided that the area demonstrates maintenance of the NAAQS without part D NSR. A detailed rationale for this view is described in a memorandum from Mary Nichols, Assistant Administrator for Air and Radiation, dated October 14, 1994, entitled, "Part D New

Source Review Requirements for Areas Requesting Redesignation to Attainment." Ohio has demonstrated that the Parkersburg-Marietta area will be able to maintain the standard without part D NSR in effect; therefore, the state need not have a fully approved part D NSR program prior to approval of the redesignation request. The state's PSD program will become effective in the Parkersburg-Marietta area upon redesignation to attainment. See rulemakings for Detroit, Michigan (60 FR 12467-12468, March 7, 1995); Cleveland-Akron-Lorain, Ohio (61 FR 20458, 20469-20470, May 7, 1996); Louisville, Kentucky (66 FR 53665, October 23, 2001); and Grand Rapids, Michigan (61 FR 31834-31837, June 21, 1996).

Section 172(c)(6) requires the SIP to contain control measures necessary to provide for attainment of the standard. Because attainment has been reached, no additional measures are needed to provide for attainment.

Section 172(c)(7) requires the SIP to meet the applicable provisions of section 110(a)(2). As noted above, we believe the Ohio's SIP meets the requirements of section 110(a)(2) applicable for purposes of redesignation.

*Subpart 1 Section 176(c)(4)(D) Conformity SIP Requirements.*

The requirement to determine conformity applies to transportation plans, programs and projects developed, funded or

approved under title 23 of the U.S. Code and the Federal Transit Act (transportation conformity), as well as to all other Federally-supported or funded projects (general conformity).

Section 176(c) of the CAA was amended by provisions contained in the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), which was signed into law on August 10, 2005 (Public Law 109-59). Among the changes Congress made to this section of the CAA were streamlined requirements for state transportation conformity SIPs. State transportation conformity regulations must be consistent with Federal conformity regulations and address three specific requirements related to consultation, enforcement and enforceability. EPA believes that it is reasonable to interpret the transportation conformity SIP requirements as not applying for purposes of evaluating the redesignation request under section 107(d) for two reasons.

First, the requirement to submit SIP revisions to comply with the transportation conformity provisions of the CAA continues to apply to areas after redesignation to attainment since such areas would be subject to a section 175A maintenance plan. Second, EPA's Federal conformity rules require the performance of conformity analyses in the absence of Federally-approved state rules. Therefore, because areas are subject to

the transportation conformity requirements regardless of whether they are redesignated to attainment and, because they must implement conformity under Federal rules if state rules are not yet approved, EPA believes it is reasonable to view these requirements as not applying for purposes of evaluating a redesignation request. *See Wall v. EPA*, 265 F.3d 426 (6th Cir. 2001), upholding this interpretation. *See also* 60 FR 62748, 62749-62750 (Dec. 7, 1995) (Tampa, Florida).

Ohio has an approved transportation conformity SIP (72 FR 20945). Ohio is in the process of updating its approved transportation conformity SIP, and EPA will review its provisions when they are submitted.

**b. The Ohio portion of the Parkersburg-Marietta Area Has a Fully Approved Applicable SIP under Section 110(k) of the CAA**

Upon final approval of Ohio's comprehensive 2005 emissions inventory, EPA will have fully approved the Ohio SIP for the Ohio portion of the Parkersburg-Marietta area under section 110(k) of the CAA for all requirements applicable for purposes of redesignation to attainment for the 1997 annual PM<sub>2.5</sub> standard. EPA may rely on prior SIP approvals in approving a redesignation request (See page 3 of the September 4, 1992, John Calcagni memorandum entitled "Procedures for Processing Requests

to Redesignate Areas to Attainment"; *Southwestern Pennsylvania Growth Alliance v. Browner*, 144 F.3d 984, 989-990 (6th Cir. 1998); *Wall v. EPA*, 265 F.3d 426 (6th Cir. 2001)), plus any additional measures it may approve in conjunction with a redesignation action. See 68 FR 25413, 25426 (May 12, 2003). Since the passage of the CAA of 1970, Ohio has adopted and submitted, and EPA has fully approved, provisions addressing various required SIP elements under particulate matter standards. In this action, EPA is proposing to approve Ohio's 2005 base year emissions inventory for the Parkersburg-Marietta area as meeting the requirement of section 172(c)(3) of the CAA for the 1997 annual PM<sub>2.5</sub> standard.

### **c. Nonattainment Requirements**

Under section 172, states with nonattainment areas must submit plans providing for timely attainment and meeting a variety of other requirements. On July 16, 2008, Ohio submitted a state-wide attainment demonstration for PM<sub>2.5</sub>, including the Parkersburg-Marietta area. However, pursuant to 40 CFR 51.1004(c), EPA's determination that the area has attained the 1997 PM<sub>2.5</sub> annual standard suspends the requirement to submit certain planning SIPs related to attainment, including attainment demonstration requirements, the Reasonably Achievable Control Technology (RACT)-RACM requirement of section 172(c)(1)



of the CAA, the RFP and attainment demonstration requirements of sections 172(c)(2) and (6) and 182(b)(1) of the CAA and the requirement for contingency measures of section 172(c)(9) of the CAA).

As a result, the only remaining requirement under section 172 to be considered is the emissions inventory required under section 172(c)(3). As discussed in a later section, EPA is proposing to approve the inventory that Ohio submitted as part of its maintenance plan as satisfying this requirement.

No SIP provisions applicable for redesignation of the Ohio portion of the Parkersburg-Marietta area are currently disapproved, conditionally approved or partially approved. If EPA approves Ohio's Parkersburg-Marietta area PM<sub>2.5</sub> emissions inventories as proposed, Ohio will have a fully approved SIP for all requirements applicable for purposes of redesignation.

**3. The Improvement in Air Quality Is Due to Permanent and Enforceable Reductions in Emissions Resulting from Implementation of the SIP and Applicable Federal Air Pollution Control Regulations and Other Permanent and Enforceable Reductions (Section 107(d)(3)(E)(iii))**

EPA believes that Ohio has demonstrated that the observed air quality improvement in the Parkersburg-Marietta area is due to permanent and enforceable reductions in emissions resulting

from implementation of the SIP, Federal measures and other state-adopted measures.

In making this demonstration, Ohio has calculated the change in emissions between 2005, one of the years used to designate the Parkersburg-Marietta area as nonattainment, and 2008, one of the years the Parkersburg-Marietta area monitored attainment. The reduction in emissions and the corresponding improvement in air quality over this time period can be attributed to a number of regulatory control measures that the Parkersburg-Marietta area and contributing areas have implemented in recent years.

**a. Permanent and Enforceable Controls Implemented**

The following is a discussion of permanent and enforceable measures that have been implemented in the area:

**i. Federal Emission Control Measures**

Reductions in fine particle precursor emissions have occurred statewide and in upwind areas as a result of Federal emission control measures, with additional emission reductions expected to occur in the future. Federal emission control measures include the following.

*Tier 2 Emission Standards for Vehicles and Gasoline Sulfur Standards.* These emission control requirements result in lower NO<sub>x</sub> and SO<sub>2</sub> emissions from new cars and light duty trucks,

including sport utility vehicles. The Federal rules were phased in between 2004 and 2009. The EPA has estimated that, by the end of the phase-in period, new vehicles will emit less NO<sub>x</sub> with the following percentage decreases: passenger cars (light duty vehicles) - 77%; light duty trucks, minivans and sports utility vehicles - 86%; and, larger sports utility vehicles, vans and heavier trucks - 69% to 95%. EPA expects fleet-wide average emissions to decline by similar percentages as new vehicles replace older vehicles. The Tier 2 standards also reduced the sulfur content of gasoline to 30 parts per million (ppm) beginning in January 2006. Most gasoline sold in Ohio prior to January 2006 had a sulfur content of about 500 ppm.

*Heavy-Duty Diesel Engine Rule.* EPA issued this rule in July 2000. This rule includes standards limiting the sulfur content of diesel fuel, which went into effect in 2004. A second phase took effect in 2007 which reduced fine particle emissions from heavy-duty highway engines and further reduced the highway diesel fuel sulfur content to 15 ppm. The total program is estimated to achieve a 90% reduction in direct PM<sub>2.5</sub> emissions and a 95% reduction in NO<sub>x</sub> emissions for these new engines using low sulfur diesel, compared to existing engines using higher sulfur content diesel. The reduction in fuel sulfur content also yielded an immediate reduction in sulfate

particle emissions from all diesel vehicles.

*Nonroad Diesel Rule.* In May 2004, EPA promulgated a new rule for large nonroad diesel engines, such as those used in construction, agriculture and mining equipment, to be phased in between 2008 and 2014. The rule also reduces the sulfur content in nonroad diesel fuel by over 99%. Prior to 2006, nonroad diesel fuel averaged approximately 3,400 ppm sulfur. This rule limited nonroad diesel sulfur content to 500 ppm by 2006, with a further reduction to 15 ppm by 2010. The combined engine and fuel rules will reduce NO<sub>x</sub> and PM<sub>2.5</sub> emissions from large nonroad diesel engines by over 90%, compared to current nonroad engines using higher sulfur content diesel. It is estimated that compliance with this rule will cut NO<sub>x</sub> emissions from nonroad diesel engines by up to 90%. This rule achieved some emission reductions by 2008, and was fully implemented by 2010. The reduction in fuel sulfur content also yielded an immediate reduction in sulfate particle emissions from all diesel vehicles.

*Nonroad Large Spark-Ignition Engine and Recreational Engine Standards.* In November 2002, EPA promulgated emission standards for groups of previously unregulated nonroad engines. These engines include large spark-ignition engines such as those used in forklifts and airport ground-service equipment; recreational

vehicles using spark-ignition engines such as off-highway motorcycles, all-terrain vehicles and snowmobiles; and recreational marine diesel engines. Emission standards from large spark-ignition engines were implemented in two tiers, with Tier 1 starting in 2004 and Tier 2 in 2007. Recreational vehicle emission standards are being phased in from 2006 through 2012. Marine Diesel engine standards were phased in from 2006 through 2009. With full implementation of the entire nonroad spark-ignition engine and recreational engine standards, an 80% reduction in NO<sub>x</sub> expected by 2020. Some of these emission reductions occurred by the 2008-2010 period used to demonstrate attainment, and additional emission reductions will occur during the maintenance period.

### **1. Control Measures in Contributing Areas**

Given the significance of sulfates and nitrates in the Parkersburg-Marietta area, the area's air quality is strongly affected by regulation of SO<sub>2</sub> and NO<sub>x</sub> emissions from power plants.

*NO<sub>x</sub> SIP Call.* On October 27, 1998 (63 FR 57356), EPA issued a NO<sub>x</sub> SIP Call requiring the District of Columbia and 22 states to reduce emissions of NO<sub>x</sub>. Affected states were required to comply with Phase I of the SIP Call beginning in 2004, and Phase II beginning in 2007. Emission reductions resulting from

regulations developed in response to the NO<sub>x</sub> SIP Call are permanent and enforceable.

*CAIR and the Transport Rule.* On May 12, 2005, EPA published the Clean Air Interstate Rule (CAIR), which requires significant reductions in emissions of SO<sub>2</sub> and NO<sub>x</sub> from electric generating units to limit the interstate transport of these pollutants and the ozone and fine particulate matter they form in the atmosphere. See 76 FR 70093. The D.C. Circuit initially vacated CAIR, *North Carolina v. EPA*, 531 F.3d 896 (D.C. Cir. 2008), but ultimately remanded the rule to EPA without vacatur to preserve the environmental benefits provided by CAIR, *North Carolina v. EPA*, 550 F.3d 1176, 1178 (D.C. Cir. 2008). In response to the court's decision, EPA issued the Transport Rule, also known as the Cross-State Air Pollution Rule, to address interstate transport of NO<sub>x</sub> and SO<sub>2</sub> in the eastern United States. See 76 FR 48208 (August 8, 2011). On August 21, 2012, the D.C. Circuit issued a decision to vacate the Transport Rule. In that decision, it also ordered EPA to continue administering CAIR "pending the promulgation of a valid replacement." *EME Homer Generation, L.P. v. EPA*, No. 11-1302 (D.C. Cir., August 21, 2012).<sup>2</sup>

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<sup>2</sup> The court's judgment is not final, as of October 31, 2012, as the mandate has not yet been issued.

In light of these unique circumstances and for the reasons explained below, EPA proposes to approve the redesignation request and the related SIP revision for Washington County in Ohio, including Ohio's plan for maintaining attainment of the PM<sub>2.5</sub> standard in the Ohio portion of the Parkersburg-Marietta Area. The air quality modeling analysis conducted for the Transport Rule demonstrates that the Parkersburg-Marietta area would be able to attain the PM<sub>2.5</sub> standard even in the absence of either CAIR or the Transport Rule. See "Air Quality Modeling Final Rule Technical Support Document," App. B, B-62 to B-134. This modeling is available in the docket for this proposed redesignation action.

In addition, CAIR remains in place and enforceable until substituted by a valid replacement rule. Ohio's CAIR SIP was approved on September 25, 2009 (74 FR 48857). As a result of CAIR, EPA projected that in 2009 emissions of NO<sub>x</sub> would decrease from a baseline of 264,000 tons per year (tpy) to 93,000 tpy while in 2010 emissions of SO<sub>2</sub> would decrease from a baseline of 1,373,000 tpy to 298,000 tpy within Ohio. And by 2015, we projected emissions of NO<sub>x</sub> would decrease to 83,000 tpy while emissions of SO<sub>2</sub> would decrease to 208,000 tpy within Ohio (<http://www.epa.gov/CAIR/oh.html>). The monitoring data used to demonstrate the area's attainment of the 1997 Annual PM<sub>2.5</sub> NAAQS

by the April 2010 attainment deadline was also impacted by CAIR. To the extent that Ohio is relying on CAIR in its maintenance plan, the recent directive from the D.C. Circuit in *EME Homer* ensures that the reductions associated with CAIR will be permanent and enforceable for the necessary time period. EPA has been ordered by the court to develop a new rule and the opinion makes clear that after promulgating that new rule EPA must provide states an opportunity to draft and submit SIPs to implement that rule. CAIR thus cannot be replaced until EPA has promulgated a final rule through a notice-and-comment rulemaking process, states have had an opportunity to draft and submit SIPs, EPA has reviewed the SIPs to determine if they can be approved, and EPA has taken action on the SIPs, including promulgating a Federal Implementation Plan (FIP) if appropriate. These steps alone will take many years, even with EPA and the states acting expeditiously. The court's clear instruction to EPA that it must continue to administer CAIR until a "valid replacement" exists provides an additional backstop; by definition, any rule that replaces CAIR and meets the court's direction would require upwind states to have SIPs that eliminate significant contributions to downwind nonattainment and prevent interference with maintenance in downwind areas.

Further, in vacating the Transport Rule and requiring EPA



to continue administering CAIR, the D.C. Circuit emphasized that the consequences of vacating CAIR "might be more severe now in light of the reliance interests accumulated over the intervening four years." *EME Homer*, slip op. at 60. The accumulated reliance interests include the interests of states who reasonably assumed they could rely on reductions associated with CAIR which brought certain nonattainment areas into attainment with the NAAQS. If EPA were prevented from relying on reductions associated with CAIR in redesignation actions, states would be forced to impose additional, redundant reductions on top of those achieved by CAIR. EPA believes this is precisely the type of irrational result the court sought to avoid by ordering EPA to continue administering CAIR. For these reasons also, EPA believes it is appropriate to allow states to rely on CAIR, and the existing emissions reductions achieved by CAIR, as sufficiently permanent and enforceable for purposes such as redesignation. Following promulgation of the replacement rule, EPA will review SIPs as appropriate to identify whether there are any issues that need to be addressed.

**b. Emission Reductions**

Ohio developed emissions inventories for NO<sub>x</sub>, direct PM<sub>2.5</sub> and SO<sub>2</sub> for 2005, one of the years used to designate the area as nonattainment, and 2008, one of the years the Parkersburg-

Marietta area monitored attainment of the standard.

Electric Generating Unit (EGU) SO<sub>2</sub> and NO<sub>x</sub> emissions were derived from EPA's Clean Air Market's acid rain database. These emissions reflect Ohio and West Virginia NO<sub>x</sub> emission budgets resulting from EPA's NO<sub>x</sub> SIP call. The 2008 emissions from EGUs reflect Ohio's emission caps under CAIR. All other point source emissions were obtained from Ohio's source facility emissions reporting.

Area source emissions in the Parkersburg-Marietta area for 2005 were taken from periodic emissions inventories.<sup>3</sup> These 2005 area source emission estimates were extrapolated to 2008. Source growth factors were supplied by the Lake Michigan Air Directors Consortium (LADCO).

Nonroad mobile source emissions were extrapolated from nonroad mobile source emissions reported in EPA's 2005 National Emissions Inventory (NEI). Contractors were employed by LADCO to estimate emissions for commercial marine vessels and railroads.

On-road mobile source emissions were calculated using EPA's mobile source emission factor model, MOVES2010a, in conjunction

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3 Periodic emission inventories are derived by states every three years and reported to the EPA. These periodic emission inventories are required by the Federal Consolidated Emissions Reporting Rule, codified at 40 CFR Subpart A. EPA revised these and other emission reporting requirements in a final rule published on December 17, 2008, at 73 FR 76539.

with transportation model results developed by the local Metropolitan Planning Organization (MPO), the Wood-Washington-Wirt Interstate Planning Commission (WWW).

All emissions estimates discussed below were documented in the submittal and appendices of Ohio's redesignation request submittal from February 29, 2012. For these data and additional emissions inventory data, the reader is referred to EPA's digital docket for this rule, <http://www.regulations.gov>, for docket number EPA-R05-OAR-2012-0212, which includes digital copies of Ohio's submittal.

Emissions data in tpy for the entire Parkersburg-Marietta area are shown in Tables 2 and 3, below.

Table 2. Summary of 2005 emissions for the entire Parkersburg-Marietta area by source type (tpy)

	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>2.5</sub>
Point (EGU)	193,252.79	28,455.23	1,745.04
Non-EGU	16,055.73	3,332.23	847.6
On-road	58.79	5,200.52	173.49
Nonroad	74.64	870.68	80.7
Area	823.36	1,047.18	1,213.27
MAR	141.75	2,547.49	86.64
Total Parkersburg- Marietta	210,407.06	41,453.33	4,146.74

Table 3. Comparison of 2005 emissions from the non-attainment year and 2008 emissions for an attainment year for the entire Parkersburg-Marietta area (tpy)

	2005	2008	Net Change (2005-2008)
PM <sub>2.5</sub>	4,146.74	3,796.59	-350.15
NO <sub>x</sub>	41,453.33	35,756.31	-5,967.02
SO <sub>2</sub>	210,407.06	159,593.17	-50,813.89

Table 3 shows that in the entire Parkersburg-Marietta area reduced direct PM<sub>2.5</sub> emissions by 350.15 tons, NO<sub>x</sub> emissions by 5,967.02 tons and SO<sub>2</sub> emissions by 50,813.89 tons between 2005, a nonattainment year, and 2008, an attainment year.

Emissions data in tpy for Washington County, Ohio (the Ohio portion of the Parkersburg-Marietta area) are shown in Tables 4, and 5, below.

Table 4. Summary of 2005 non-attainment year emissions for the Ohio portion of the Parkersburg-Marietta area by source type (tpy)

	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>2.5</sub>
Point (EGU)	140,957.01	16,137.09	384.81
Non-EGU	5,200.90	1,748.86	472.37
On-road	26.97	2,687.09	90.45
Nonroad	41.04	425.97	35.53
Area	9.78	168.44	148.43
MAR	44.48	500.78	11.76
Total Parkersburg- Marietta	146,280.18	21,668.23	1,143.35

Table 5. Comparison of 2005 emissions from the non-attainment year and 2008 emissions for an attainment year for the Ohio portion of the Parkersburg-Marietta area (tpy)

	2005	2008	Net Change (2005-2008)
PM <sub>2.5</sub>	1,143.35	1,203.35	+60.00
NO <sub>x</sub>	21,668.23	22,365.96	+697.73
SO <sub>2</sub>	146,280.18	138,786.24	-7,493.94

Table 5 shows that while NO<sub>x</sub> and PM<sub>2.5</sub> emissions rose by 697.73 tpy and 60 tpy, respectively, the Ohio portion of the Parkersburg-Marietta area reduced SO<sub>2</sub> emissions by 7,493.94 tpy between 2005, a nonattainment year and 2008, an attainment year. Despite NO<sub>x</sub> and PM<sub>2.5</sub> emissions increasing in the Ohio portion of the Parkersburg-Marietta area between 2005 and 2008, the area demonstrated attainment of the NAAQS in 2008, as the combined Parkersburg-Marietta area reduced NO<sub>x</sub> emissions by 5,697 tpy and PM<sub>2.5</sub> by 350.15 tpy between 2005 and 2008. The state submission includes multiple lines of evidence to show that even with the increase in NO<sub>x</sub> and PM<sub>2.5</sub> the area has still reached attainment of the 1997 annual PM<sub>2.5</sub> NAAQS and will continue to maintain that designation into the future due to multiple actions on the state's behalf. The weight of evidence submitted by the state

contains modeling, monitoring and trend analysis. The trend analysis for the area shows a steady trend of declining PM<sub>2.5</sub> monitored data, with a significant drop in concentrations beginning in 2006. Since meteorology can play a large part in dispersion of PM<sub>2.5</sub>, which can greatly affect monitored concentrations, LADCO and the state have normalized the data to remove meteorological effects using a statistical analysis, the state has shown in their submission that the concentrations observed are due to real reductions in PM<sub>2.5</sub> and its precursors, and not just meteorological effects. In addition, control of emissions from local power plants through local and national programs have impacted and will continue to impact the area, as we will describe below.

In 2008, American Electric Power's Muskingum River Station in Washington County, Ohio, implemented the continuous operation of an advanced NO<sub>x</sub> control device on their largest of five units (unit #5), as part of a federally-enforceable consent decree. The Muskingum River Station is also required to retire, repower or retrofit all remaining units by 2015. Initial plans provided by the Muskingum River Station to Ohio indicate that unit #5 will also install a flue gas desulfurization device in addition to its consent decree-mandated NO<sub>x</sub> control device. Another local power plant, American Municipal Power's R.H. Gorsuch Station in

Washington County, permanently shut down at the end of 2010, and would require an approvable permit to restart. This facility operated four 53 megawatt (MW) units. The result of federally-mandated consent decree actions and the shutdown of a power plant demonstrate that NO<sub>x</sub> reductions from power plants in the Parkersburg-Marietta area have occurred and will continue to occur in the future.

Based on the information summarized above, Ohio has adequately demonstrated that the improvement in air quality is due to permanent and enforceable emissions reductions.

**4. Ohio Has a Fully Approved Maintenance Plan Pursuant to Section 175A of the CAA (Section 107(d)(3)(E)(iv))**

In conjunction with Ohio's request to redesignate the Ohio portion of the Parkersburg-Marietta nonattainment area to attainment status, Ohio has submitted a SIP revision to provide for maintenance of the 1997 annual PM<sub>2.5</sub> NAAQS in the area through 2022.

**a. What Is Required in a Maintenance Plan?**

Section 175A of the CAA sets forth the required elements of a maintenance plan for areas seeking redesignation from nonattainment to attainment. Under section 175A, the plan must demonstrate continued attainment of the applicable NAAQS for at least ten years after EPA approves a redesignation to

attainment. Eight years after redesignation, the state must submit a revised maintenance plan which demonstrates that attainment will continue to be maintained for ten years following the initial ten-year maintenance period. To address the possibility of future NAAQS violations, the maintenance plan must contain contingency measures with a schedule for implementation as EPA deems necessary to assure prompt correction of any future annual  $PM_{2.5}$  violations.

The September 4, 1992, memorandum from John Calcagni, entitled "Procedures for Processing Requests to Redesignate Areas to Attainment," (Calcagni Memorandum) provides additional guidance on the content of a maintenance plan. The memorandum states that a maintenance plan should address the following items: the attainment emissions inventories, a maintenance demonstration showing maintenance for the ten years of the maintenance period, a commitment to maintain the existing monitoring network, factors and procedures to be used for verification of continued attainment of the NAAQS and a contingency plan to prevent or correct future violations of the NAAQS.

**b. Attainment Inventory**

Ohio developed emissions inventories for  $NO_x$ , direct  $PM_{2.5}$  and  $SO_2$  for 2008, one of the years in the period during which the



Parkersburg-Marietta area monitored attainment of the 1997 annual PM<sub>2.5</sub> standard, as described previously. The attainment levels of emissions for the entire area, as well as the attainment levels of emissions for the Ohio portion of the area were summarized in Tables 3 and 5, above.

**c. Demonstration of Maintenance**

Along with the redesignation request, Ohio submitted a revision to its PM<sub>2.5</sub> SIP to include a maintenance plan for the Parkersburg-Marietta area, as required by section 175A of the CAA. Section 175A requires a State seeking redesignation to attainment to submit a SIP revision to provide for the maintenance of the NAAQS in the area "for at least 10 years after the redesignation." EPA has interpreted this as a showing of maintenance "for a period of ten years following redesignation." Calcagni Memorandum, p. 9. Where the emissions inventory method of showing maintenance is used, its purpose is to show that emissions during the maintenance period will not increase over the attainment year inventory. Calcagni Memorandum, pp. 9-10.

As discussed in detail in the section below, the state's maintenance plan submission expressly documents that the area's emissions inventories will remain below the attainment year inventories through 2022. In addition, for the reasons set

forth below, EPA believes that the state's submission, in conjunction with additional supporting information, further demonstrates that the area will continue to maintain the PM<sub>2.5</sub> standard at least through 2023. Thus, if EPA finalizes its proposed approval of the redesignation request and maintenance plans in 2013, it is based on a showing, in accordance with section 175A, that the state's maintenance plan provides for maintenance for at least ten years after redesignation.

Ohio's plan demonstrates maintenance of the 1997 annual PM<sub>2.5</sub> standard through 2022 by showing that current and future emissions of NO<sub>x</sub>, directly emitted PM<sub>2.5</sub> and SO<sub>2</sub> for the area remain at or below attainment year emission levels. A maintenance demonstration need not be based on modeling. See *Wall v. EPA*, 265 F. 3d 426 (6th Cir. 2001), *Sierra Club v. EPA*, 375 F. 3d 537 (7th Cir. 2004). See also 66 FR 53094, 53099-53100 (October 19, 2001), and 68 FR 25413, 25430-25432 (May 12, 2003).

Ohio's submission uses emissions inventory projections for the years 2015 and 2022 to demonstrate maintenance for the Ohio portion of the Parkersburg-Marietta area. The projected emissions were estimated by Ohio, with assistance from LADCO and WWW using the MOVES2010a model. Projection of inventory emissions was done for the 2015 interim year emissions using

estimates based on the 2009 and 2018 LADCO modeling inventory, using LADCO's growth factors, for all sectors. The 2022 maintenance year emissions are based on emissions estimates from the 2018 LADCO modeling. Table 7 shows the 2008 attainment base year emission estimates and the 2015 and 2022 emission projections for the entire tri-state Parkersburg-Marietta area that Ohio provided in its February 29, 2012, submission.

Table 6 Comparison of 2008, 2015 and 2022 NO<sub>x</sub>, direct PM<sub>2.5</sub> and SO<sub>2</sub> emission totals (tpy) for the Ohio portion of the Parkersburg-Marietta area

	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>2.5</sub>
2008(baseline)	138,786.24	22,365.96	1,203.35
2015	67,625.84	11,439.41	1,198.61
2022	37,351.17	6,417.53	1,181.01
Change 2008-2022	-101,435.07 73% decrease	-15,948.43 71% decrease	-22.34 2% decrease

Table 6 shows that the Ohio portion of the Parkersburg-Marietta area will reduce NO<sub>x</sub> emissions by 15,948.43 tpy between 2008 and the maintenance projection to 2022, direct PM<sub>2.5</sub> emissions by 22.34 tpy, and reduced SO<sub>2</sub> emissions by 101,435.07 tpy between 2008 and 2022. The 2022 projected emissions levels are significantly below attainment year inventory levels, and based on the rate of decline, it is highly improbable that any increases in these levels will occur in 2023 and beyond.

EPA has done analysis of the areas emissions, and has concluded that the Parkersburg-Marietta area's emissions can be expected to stay well below the level of emissions from their attainment year emissions inventory. First, EPA has determined that the overall net rate of decline in emissions of  $PM_{2.5}$ ,  $NO_x$  and  $SO_2$  projected from the attainment year 2008 through 2022 are approximately 1.59 tpy, 1139.17 tpy and 7246.10 tpy, respectively. EPA has also determined that no control measures taken into account in the projected analysis will end in 2023, nor does EPA expect any change in growth for the Parkersburg-Marietta area for the maintenance year 2023. The net rates of decline, coupled with continued control and growth factors, indicate that emissions inventory levels will not only significantly decline between 2008 and 2022, but that the reductions will continue into 2023 and beyond. Second, EPA notes that the rate of emissions decline is consistent with monitored and projected air quality trends. As Table 1 demonstrates, monitored  $PM_{2.5}$  design value concentrations in Parkersburg-Marietta are well below the NAAQS in the years beyond 2008, an attainment year for the area. Further, those values are trending downward as time progresses. Based on the future projections of emissions in 2015 and 2022 showing significant emissions reductions in direct  $PM_{2.5}$ ,  $NO_x$  and  $SO_2$ , it

is very unlikely that monitored PM<sub>2.5</sub> values in 2023 and beyond will show violations of the NAAQS. Additionally, the 2009-2011 design value of 12.3 µg/m<sup>3</sup> provides a sufficient margin in the unlikely event emissions rise slightly in the future. We are proposing to find the mobile source contribution to these emissions insignificant (see section V(5) of this action for further discussion), and the mobile source contribution is expected to remain insignificant in 2023 and beyond because of fleet turnover and engine emission standards in upcoming years that will result in cleaner vehicles and cleaner fuels.

As described in section V(3)(b) of this action, the result of federally-mandated consent decree actions and the shutdown of a power plant demonstrate that NO<sub>x</sub> reductions from power plants in the Parkersburg-Marietta area have occurred and are mandated to continue to occur in 2023 and beyond. Thus, the emissions inventories set forth in Table 6 show that the area will continue to maintain the annual PM<sub>2.5</sub> standard during the maintenance period and at least through 2023. These consent decree actions are significant controls of NO<sub>x</sub> and SO<sub>2</sub>, along with implementation of Ohio's SIP approved CAIR controls for the area.

In light of the unique circumstances surrounding CAIR and the Transport Rule discussed in section V(3)(a)(i)(1) of this

action, and for the reasons explained below, EPA proposes to approve the redesignation request and the related SIP revision for Washington County in Ohio, including Ohio's plan for maintaining attainment of the PM<sub>2.5</sub> standard in the Ohio portion of the Parkersburg-Marietta Area. The air quality modeling analysis conducted for the Transport Rule demonstrates that the Parkersburg-Marietta area would be able to attain the PM<sub>2.5</sub> standard even in the absence of either CAIR or the Transport Rule. See "Air Quality Modeling Final Rule Technical Support Document," App. B, B-62 to B-134. This modeling is available in the docket for this proposed redesignation action.

In addition, CAIR remains in place and enforceable until substituted by a valid replacement rule. Ohio's CAIR SIP was approved on September 25, 2009 (74 FR 48857). As a result of CAIR, EPA projected that in 2009 emissions of NO<sub>x</sub> would decrease from a baseline of 264,000 tpy to 93,000 tpy while in 2010 emissions of SO<sub>2</sub> would decrease from a baseline of 1,373,000 tpy to 298,000 tpy within Ohio. And by 2015, we project emissions of NO<sub>x</sub> will decrease to 83,000 tpy while emissions of SO<sub>2</sub> will decrease to 208,000 tpy within Ohio (<http://www.epa.gov/CAIR/oh.html>). The monitoring data used to demonstrate the area's attainment of the 1997 Annual PM<sub>2.5</sub> NAAQS by the April 2010 attainment deadline was also impacted by CAIR.

To the extent that Ohio is relying on CAIR in its maintenance plan, the recent directive from the D.C. Circuit in *EME Homer* ensures that the reductions associated with CAIR will be permanent and enforceable for the necessary time period. EPA has been ordered by the court to develop a new rule and the opinion makes clear that after promulgating that new rule EPA must provide states an opportunity to draft and submit SIPs to implement that rule. CAIR thus cannot be replaced until EPA has promulgated a final rule through a notice-and-comment rulemaking process, states have had an opportunity to draft and submit SIPs, EPA has reviewed the SIPs to determine if they can be approved, and EPA has taken action on the SIPs, including promulgating a FIP if appropriate. These steps alone will take many years, even with EPA and the states acting expeditiously. The court's clear instruction to EPA that it must continue to administer CAIR until a "valid replacement" exists provides an additional backstop; by definition, any rule that replaces CAIR and meets the court's direction would require upwind states to have SIPs that eliminate significant contributions to downwind nonattainment and prevent interference with maintenance in downwind areas.

Further, in vacating the Transport Rule and requiring EPA to continue administering CAIR, the D.C. Circuit emphasized that

the consequences of vacating CAIR "might be more severe now in light of the reliance interests accumulated over the intervening four years." *EME Homer*, slip op. at 60. The accumulated reliance interests include the interests of states who reasonably assumed they could rely on reductions associated with CAIR which brought certain nonattainment areas into attainment with the NAAQS. If EPA were prevented from relying on reductions associated with CAIR in redesignation actions, states would be forced to impose additional, redundant reductions on top of those achieved by CAIR. EPA believes this is precisely the type of irrational result the court sought to avoid by ordering EPA to continue administering CAIR. For these reasons also, EPA believes it is appropriate to allow states to rely on CAIR, and the existing emissions reductions achieved by CAIR, as sufficiently permanent and enforceable for purposes such as redesignation. Following promulgation of the replacement rule, EPA will review SIPs as appropriate to identify whether there are any issues that need to be addressed.

Based on the information summarized above, Ohio has adequately demonstrated maintenance of the PM<sub>2.5</sub> standard in this area for a period extending in excess of ten years from expected final action on Ohio's redesignation request.

**d. Monitoring Network**



Ohio's plan includes a commitment to continue working with West Virginia to operate its EPA-approved monitoring network, as necessary to demonstrate ongoing compliance with the NAAQS. Ohio currently does not operate a PM<sub>2.5</sub> monitor in Washington County to monitor the Ohio portion of the Parkersburg-Marietta area. West Virginia currently operates one monitor in Wood County for the Parkersburg-Marietta area.

**e. Verification of Continued Attainment**

Ohio remains obligated to continue to quality-assure monitoring data and enter all data into the Air Quality System in accordance with Federal guidelines. Ohio will use these data, supplemented with additional information as necessary, to assure that the area continues to attain the standard. Ohio will also continue to develop and submit periodic emission inventories as required by the Federal Consolidated Emissions Reporting Rule (67 FR 39602, June 10, 2002) to track future levels of emissions. Both of these actions will help to verify continued attainment in accordance with 40 CFR part 58.

**f. Contingency Plan**

The contingency plan provisions are designed to promptly correct or prevent a violation of the NAAQS that might occur after redesignation of an area to attainment. Section 175A of the CAA requires that a maintenance plan include such

contingency measures as EPA deems necessary to assure that the state will promptly correct a violation of the NAAQS that occurs after redesignation. The maintenance plan should identify the contingency measures to be adopted, a schedule and procedure for adoption and implementation of the contingency measures, and a time limit for action by the state. The state should also identify specific indicators to be used to determine when the contingency measures need to be adopted and implemented. The maintenance plan must include a requirement that the state will implement all measures with respect to control of the pollutant(s) that were contained in the SIP before redesignation of the area to attainment. See section 175A(d) of the CAA. Ohio's contingency measures include a Warning Level Response and an Action Level Response. An initial Warning Level Response is triggered when the average weighted annual mean for one year exceeds  $15.5 \mu\text{g}/\text{m}^3$ . In that case, a study will be conducted to determine if the emissions trends show increases; if action is necessary to reverse emissions increases, Ohio will follow the same procedures for control selection and implementation as for an Action Level Response.

The Action Level Response will be prompted by any one of the following: a Warning Level Response study that shows emissions increases, a weighted annual mean over a two-year

average that exceeds the standard or a violation of the standard. If an Action Level Response is triggered, Ohio will adopt and implement appropriate control measures within 18 months from the end of the year in which monitored air quality triggering a response occurs.

Ohio's candidate contingency measures include the following:

- i. ICI Boilers - SO<sub>2</sub> and NO<sub>x</sub> controls;
- ii. Process heaters;
- iii. EGUS;
- iv. Internal combustion engines;
- v. Combustion turbines;
- vi. Other sources > 100 TPY;
- vii. Fleet vehicles;
- viii. Concrete manufacturers and;
- ix. Aggregate processing plants.

Ohio further commits to conduct ongoing review of its data, and if monitored concentrations or emissions are trending upward, Ohio commits to take appropriate steps to avoid a violation if possible. Ohio commits to continue implementing

SIP requirements upon and after redesignation.

EPA believes that Ohio's contingency measures, as well as the commitment to continue implementing any SIP requirements, satisfy the pertinent requirements of section 175A(d).

As required by section 175A(b) of the CAA, Ohio commits to submit to the EPA an updated PM<sub>2.5</sub> maintenance plan eight years after redesignation of the Parkersburg-Marietta area to cover an additional ten-year period beyond the initial ten-year maintenance period. As required by section 175A of the CAA, Ohio has also committed to retain the PM<sub>2.5</sub> control measures contained in the SIP prior to redesignation.

For all of the reasons set forth above, EPA is proposing to approve Ohio's 1997 annual PM<sub>2.5</sub> maintenance plan for the Parkersburg-Marietta area as meeting the requirements of CAA section 175A.

## **5. Insignificance Determination for the Mobile Source**

### **Contribution to PM<sub>2.5</sub> and NO<sub>x</sub>**

Under section 176(c) of the CAA, transportation plans and transportation improvement programs (TIPs) must conform to applicable SIP goals. This means that such actions will not:

(1) cause or contribute to violations of a NAAQS; (2) worsen the severity of an existing violation; or (3) delay timely attainment of a NAAQS or any interim milestone. Actions

involving Federal Highway Administration (FHWA) or Federal Transit Administration (FTA) funding or approval are subject to the Transportation Conformity Rule (40 CFR part 93 subpart A). Under this rule, MPOs in nonattainment and maintenance areas coordinate with state air quality agencies and federal air and transportation agencies (EPA, FHWA and FTA) to demonstrate that their metropolitan transportation plans ("plans") and TIPS conform to applicable SIPs. This is typically determined by showing that estimated emissions from existing and planned highway and transit systems are less than or equal to the motor vehicle emissions budgets contained in a SIP.

For budgets to be approvable, they must meet, at a minimum, EPA's adequacy criteria (40 CFR 93.118(e)(4)). However, the Transportation Conformity Rule at 40 CFR 93.109(m) allows areas to forgo establishment of a budget(s) where it is demonstrated that regional motor vehicle emissions for a particular pollutant or precursor pollutant are an insignificant contributor to the air quality problem in the area. The general criteria for insignificance determinations per 40 CFR 93.109(m) are based on a number of factors, including (1) the percentage of motor vehicle emissions in context of the total SIP inventory; (2) the current state of air quality as determined by monitoring data for that NAAQS; (3) the absence of SIP motor vehicle control

measures; and (4) historical trends and future projections of the growth of motor vehicle emissions in the area.

The redesignation request that Ohio submitted for its portion of the Parkersburg-Marietta area includes a request for EPA to make an insignificance finding for NO<sub>x</sub> and directly emitted PM<sub>2.5</sub> for the Ohio portion of the Parkersburg-Marietta PM<sub>2.5</sub> nonattainment area. Pursuant to Section 93.118(e)(4) and 93.109(k) of the Transportation Conformity Rule, as part of the review of Ohio's redesignation request and maintenance plan submittal, we have reviewed Ohio's justification for the finding of insignificance for direct PM<sub>2.5</sub> and also for NO<sub>x</sub> as a precursor of PM<sub>2.5</sub> in the Ohio portion of the Parkersburg-Marietta area. EPA agrees with Ohio's conclusion that on-road emissions of PM<sub>2.5</sub> and NO<sub>x</sub> are insignificant for transportation conformity purposes. We base our finding on several factors:

- The fact that on December 7, 2009 (74 FR 64075), EPA found these budgets to be insignificant as part of our review of the state's July 16, 2008, PM<sub>2.5</sub> attainment demonstration;

- The fact that the area has been determined to attain the annual PM<sub>2.5</sub> standard, and continues to attain the standard with the most recent three years of complete, quality assured monitoring data;

- The absence of local on-road control measures; and
- The continued downward trend of on-road NO<sub>x</sub> and PM<sub>2.5</sub> emissions from 2005-2022.

Consistent with EPA's adequacy review of Ohio's redesignation request and maintenance plan and the Agency's thorough review of the entire SIP submission, EPA is proposing to approve Ohio's insignificance determination for the on-road motor vehicle contribution of NO<sub>x</sub> and PM<sub>2.5</sub> emissions to the overall PM<sub>2.5</sub> emissions in the Ohio portion of the Parkersburg-Marietta PM<sub>2.5</sub> area.

Because EPA finds that Ohio's submitted maintenance plan and redesignation request meets the criteria in the conformity rule for an insignificance finding for motor vehicle emissions of NO<sub>x</sub> and PM<sub>2.5</sub> in the Ohio portion of the Parkersburg-Marietta PM<sub>2.5</sub> area, it is not necessary to establish PM<sub>2.5</sub> and NO<sub>x</sub> budgets for the Ohio portion of the Parkersburg-Marietta PM<sub>2.5</sub> area. That is, EPA finds that the submittal demonstrates that, for NO<sub>x</sub> and PM<sub>2.5</sub>, regional motor vehicle emissions are an insignificant contributor to the annual PM<sub>2.5</sub> air quality problem in the Ohio portion of the area. Motor vehicle emissions in general, for the maintenance period of 2015 and 2022, are low and declining in the Ohio portion of the area. In 2015 the percentage contribution to emissions from the Ohio portion of the area from

motor vehicles is 10.49% and 3.48% for NO<sub>x</sub> and PM<sub>2.5</sub>, respectively. In 2022, motor vehicles in the Ohio portion of the area are projected to contribute only 8.92% and 2.14% of emissions for NO<sub>x</sub>, and PM<sub>2.5</sub>, respectively, with the decrease due to Federal regulations on motor vehicle rules such as Heavy-duty Highway Vehicle standards and Tier 2 vehicle and fuel standards. Also, there have been no SIP requirements for motor vehicle control measures for the Ohio portion of the area and it is unlikely that motor vehicle control measures will be implemented for PM<sub>2.5</sub> in this area in the future.

Finally, as described above, the area has attained the 1997 annual PM<sub>2.5</sub> NAAQS and we are proposing to approve the maintenance plan and redesignation request for the Ohio portion of the area. Therefore motor vehicle emissions budgets for PM<sub>2.5</sub> and NO<sub>x</sub> are not required for the Parkersburg-Marietta area to maintain the 1997 annual PM<sub>2.5</sub> NAAQS. EPA is proposing to approve the inventory and the findings of insignificant contribution by motor vehicles, resulting in no proposed motor vehicle emissions budgets for the Ohio portion of the Parkersburg-Marietta area for 2015 and 2022 projected maintenance years. On-road emissions were calculated using the EPA required MOVES2010a model.

With regard to on-road emissions of SO<sub>2</sub>, volatile organic



compounds and ammonia, Ohio did not provide emission budgets (or an insignificance demonstration) because it concluded, consistent with EPA's presumptions regarding these  $PM_{2.5}$  precursors, that emissions of these precursors from motor vehicles are not significant contributors to the area's  $PM_{2.5}$  air quality problem.

As discussed in section V(4)(c) of this action, EPA is proposing that if this approval is finalized in 2013 the area will continue to maintain the  $PM_{2.5}$  standard through at least 2023. Consistent with this proposal, EPA is proposing to determine the insignificance of motor vehicle emissions of  $NO_x$  and  $PM_{2.5}$  as submitted by the State in its February 29, 2012, maintenance plan for the Ohio portion of the Parkersburg-Marietta area. EPA is proposing that the proposed finding insignificance of these emissions is consistent with maintenance of the Ohio portion of the Parkersburg-Marietta area through 2023.

#### **6. 2005 Comprehensive Emissions Inventory**

As discussed above, section 172(c)(3) of the CAA requires areas to submit a comprehensive emissions inventory. Ohio submitted a 2005 base year emissions inventories that meets this requirement. Emissions contained in the submittals cover the general source categories of point sources, area sources, on-

road mobile sources, and nonroad mobile sources.

For the point source sector, EGU SO<sub>2</sub> and NO<sub>x</sub> emissions were derived from EPA's Clean Air Market's database. All other point source emissions were obtained from Ohio's source facility emissions reporting.

Area source emissions were extrapolated from Ohio's 2005 periodic emissions inventories. Source growth factors were supplied by LADCO.

Nonroad mobile source emissions were extrapolated from nonroad mobile source emissions reported in EPA's 2005 NEI. LADCO estimated emissions for commercial marine vessels and railroads.

On-road mobile source emissions were calculated using EPA's mobile source emission factor model, MOVES2010a, in conjunction with roadway network traffic information prepared by WWW.

All emissions discussed in Table 4 were documented in the submittal and the Appendices of Ohio's redesignation request submittal. EPA has reviewed Ohio's documentation of the emissions inventory techniques and data sources used for the derivation of the 2005 emissions estimates and has found that Ohio has thoroughly documented the derivation of these emissions inventories. The submittal from the state shows that the 2005 emissions inventory is currently the most complete emissions

inventories for PM<sub>2.5</sub> and PM<sub>2.5</sub> precursors in the Parkersburg-Marietta area. Based upon EPA's review, we propose to find that the 2005 emissions inventories are as complete and accurate as possible given the input data available to the Ohio, and we are proposing to approve them under CAA section 172(c)(3).

## **7. Summary of Proposed Actions.**

EPA has previously determined that the Parkersburg-Marietta area has attained the 1997 annual PM<sub>2.5</sub> NAAQS. EPA is proposing to determine that the entire Parkersburg-Marietta area continues to attain the 1997 annual PM<sub>2.5</sub> standard using the latest three years of certified, quality-assured data, and that the Ohio portion of the area has met the requirements for redesignation under section 107(d)(3)(E) of the CAA. EPA is proposing to approve the request from Ohio to change the legal designation of the Ohio portion of the Parkersburg-Marietta area from nonattainment to attainment for the 1997 annual PM<sub>2.5</sub> NAAQS. EPA is proposing to approve Ohio's PM<sub>2.5</sub> maintenance plan for the Parkersburg-Marietta area as a revision to the Ohio SIP because the plan meets the requirements of section 175A of the CAA. EPA is proposing to approve the 2005 emissions inventories for primary PM<sub>2.5</sub>, NO<sub>x</sub>, and SO<sub>2</sub>, documented in Ohio's February 29, 2012, submittal as satisfying the requirement in section 172(c)(3) of the CAA for a comprehensive, current emission

inventory. Finally, for transportation conformity purposes EPA is also proposing to approve Ohio's determination that on-road emissions of PM<sub>2.5</sub> and NO<sub>x</sub> are insignificant contributors to PM<sub>2.5</sub> concentrations in the area.

#### **VI. What are the Effects of EPA's Proposed Actions?**

If finalized, approval of the redesignation request would change the official designation of the Ohio portion of the Parkersburg-Marietta area for the 1997 annual PM<sub>2.5</sub> NAAQS, found at 40 CFR part 81, from nonattainment to attainment. If finalized, EPA's proposal would approve as a revision to the Ohio SIP for the Parkersburg-Marietta area, the maintenance plan for the 1997 annual PM<sub>2.5</sub> standard as well as the 2005 emissions inventories included with the redesignation request.

#### **VII. Statutory and Executive Order Reviews.**

Under the CAA, redesignation of an area to attainment and the accompanying approval of a maintenance plan under section 107(d)(3)(E) are actions that affect the status of a geographical area and do not impose any additional regulatory requirements on sources beyond those imposed by state law. A redesignation to attainment does not in and of itself create any new requirements, but rather results in the applicability of requirements contained in the CAA for areas that have been redesignated to attainment. Moreover, the Administrator is

required to approve a SIP submission that complies with the provisions of the CAA and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this action merely approves state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, these actions:

- are not a "significant regulatory action" subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);
- do not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- are certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- do not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- do not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);

- are not economically significant regulatory actions based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- are not significant regulatory actions subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- are not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
- do not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, this rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because the SIP is not approved to apply in Indian country located in the state, and EPA notes that it will not impose substantial direct costs on tribal governments or preempt tribal law.

**List of Subjects**

**40 CFR part 52**

Environmental protection, Air pollution control,  
Incorporation by reference, Intergovernmental relations,  
Particulate matter.

**40 CFR part 81**

Air pollution control, Environmental protection, National  
Parks, Wilderness

Dated: November 15, 2012.

Susan Hedman,  
Regional Administrator, Region 5.

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